

employees and another \$2,500 to return the departing employee to his point of hire in another state. Another cost of outside recruitment is about one million dollars spent each year for those who continue on duty in Alaska but receive reemployment leave, and travel benefits popularly known as home leave.

HEALTH

What are the conditions of native health and how do they compare with the National average? What is the significance of Alaska's native health conditions to the National image? "There seems little doubt that the principle health problem is the high morbidity and mortality from acute infectious disease among infants and preschool children. Galstroenteritis, pneumonia and meningitis are the principle killers, accounting for twenty-nine out of sixty known deaths among children less than five years of age during 1965. The previous year, 22 percent of all hospital admissions were in this age group, an estimated ninety percent of which were for acute infectious diseases. After the three diseases listed above, chickenpox, bronchitis, otitis media, infectious hepatitis, impetigo, streptococcal sore throat, and upper respiratory illness are the most important causes of morbidity." (*Health Conditions among the Eskimos of the Yukon Kuskokwim Delta, Alaska* by Robert Fortune, M.D.)

Based on the best figure available for 1965 the infant mortality in the area was 118 per 1000 live births, compared with a U.S. Indian average of 42.9 (both for 1963). More significant, perhaps, is the fact that the Delta area has an infant mortality over twice that of Alaska natives as a whole. The postneonatal death rate (28 days through 11 months) for the area is a striking 96 per 1000, live births, about fourteen times the national average and nearly four times the Indian or Alaskan native rate. This figure portrays clearly the extraordinary role of infectious disease as a cause of infant deaths. Indeed over two-thirds of all deaths in the 0-4 year group in 1965 were known to be due to infectious diseases.

The next most significant health problem is the excessively high incidence of non-tuberculous respiratory disease. Lobar pneumonia, broncho-pneumonia, acute and chronic bronchitis, bronchiectasis, and upper respiratory infections account for more hospital admissions and hospital-patient days than any other type of illness. During 1964, 17% of admissions to the hospital were for a primary diagnosis of respiratory disease other than tuberculosis. Many other illnesses treated in the outpatient clinic or on village trips are respiratory.

Of these diseases, lobar pneumonia and bronchiectasis deserve special emphasis. Lobar consolidation of the lung is exceedingly common, especially in preschoolers. Although most cases respond well to antibiotic treatment, a significant number go on to complications such as empyema and bronchiectasis. This latter disease has only fairly recently been recognized to be widespread among Eskimo children. As yet the basic pathogenesis is unclear and further study of this interesting condition is warranted.

Tuberculosis called the 'Alaskan scourge' by the Parran Committee, has perhaps declined in relative importance as a health problem but still ranks a strong third. In 1947, Dr. Langsam of Bethel estimated that 50% of all cases seen at the hospital were complicated by tuberculosis. The average annual infection rate among children 0-3 years in 1949-51 was estimated at an astounding 24.6%, a situation virtually unparalleled in the medical literature. The Parran Report (1954) strongly recommended a crash attack on tuberculosis based principally on a program of ambulatory chemotherapy at home, utilizing isonized and PAS. This program was administered in the Bethel Area by the Arctic Health Research Center. By 1957, the average annual infection rate in 0-3 year-olds has dropped to 8.5%. From 1957-59, the Arctic Health Research Center carried on a controlled trial of isoniazid prophylaxis in twenty-eight villages in the Delta region. By 1960 the annual infection rate was a mere 1%, a striking tribute to the effectiveness of these control measures.

The tuberculosis epidemic has continued to abate until the present, although the disease still causes great economic hardship in the region. A reorganized and intensified attack on the problem in recent years promises to reduce its incidence even further. During the first nine months of 1965 twenty-one new sputum-positive cases were found, for an annual incidence rate of 262 per 100,000. Many other patients are screened for activity because of a suspicious chest film. Extrapulmonary tuberculosis is still seen but is becoming more uncommon. New cases of tuberculous meningitis, military tuberculosis, tuberculous pericarditis and Pott's disease have all been diagnosed during the past year.